

# Brass Compression Fitting Range

## Brass Fittings

### Stud Fittings

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# Brass Compression Fittings

These **"universal"** fittings provide users with **numerous connection** options for a wide variety of tube materials without the need for tube threading or soldering. This range **guarantees** excellent long-term sealing and performance.

## Product Advantages

### Simple to Install and Use

- Suitable for pneumatic and medium pressure hydraulic applications
- Compatible with many industrial fluids
- Large product range: 22 configurations
- Excellent sealing due to the tightening of the olive onto the tube
- Metallic sealing guarantees maximum service life
- High strength brass for increased mechanical reliability

### Wide Variety of Tubing

- Connection of different types of tubing and hose: metal, polymer, steel, rubber, etc.
- Multiple tube diameters can be connected using the Parker Legris reducer assembly system
- No insert required for rigid and semi-rigid polyamide tubing below 14 mm



**Applications**

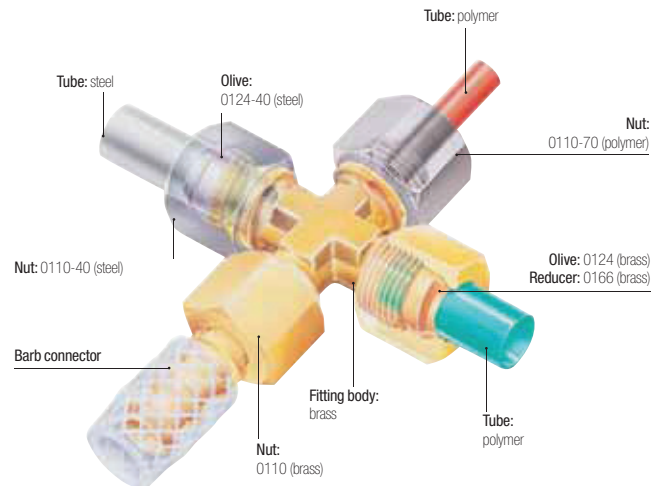
- Pneumatics
- Cooling
- Automotive Process
- Lubrication
- Fluid Transmission
- Packaging
- Industrial Machinery

## Technical Characteristics

<b>Compatible Fluids</b>	Water, machining oil, fuel, hydraulic oil, compressed air, chemical fluids, disinfectants
<b>Working Pressure</b>	Vacuum to 550 bar
<b>Working Temperature</b>	-40°C to +250°C
<b>Tightening Torque</b>	See "Technical Characteristics" on opposite page

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used. Guaranteed for use with a vacuum of 755 mm Hg (99% vacuum).

### Component Materials



### Silicone-free

### Maximum Bore Diameters

The table below shows the recommended compatibility of tube size, BSPP male thread and maximum bore.

Tube O.D.	BSPP Thread	Max. Bore
4-5-6	G1/8	4
6-8-10	G1/4	7
10-12-14	G3/8	11
14-15-16-18	G1/2	14
18-20-22	G3/4	18
22-25-28	G1	24

### Tube Length for Assembly

Minimum length of tube (L) between 2 fittings.



ØD	L (mm)	ØD	L (mm)	ØD	L (mm)
4	26.5	12	39	20	51
5	26	14	41	22	54
6	26	15	41	25	62
8	32	16	46.5	28	62
10	39	18	49.5		

### Regulations

**CNOMO:** E07.21.115N  
(for robotic equipment in the automotive industry)  
**DI:** 97/23/EC (PED)  
**RG:** 1907/2006 (REACH)  
**DI:** 2002/95/EC (RoHS)  
**DI:** 94/9/EC (ATEX)

# Technical Characteristics

## Installing Compression Fittings

### Cutting the Tube



Cut the polymer or metal tube square.

### Preparing the Connection



For metal tubing, de-burr the tube prior to connection. Tube bending should be done before connection.



Slide the nut onto the tube; lubricate the threads on the body and nut along with the olive to facilitate tightening (for metal tubing as well). Fit the olive onto the end of the tube.

### Connecting the Tube



Push the tube up against the shoulder of the body of the fitting and hand tighten.

### Final Assembly



Tighten the nut using a spanner or torque wrench to enable the olive to bite on the tube, the connection being completed when the recommended tightening torque is reached (see tables below).

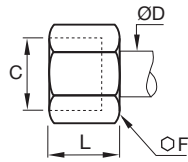


It is recommended to use an insert in order to prevent tube creeping (diameter > 14mm)

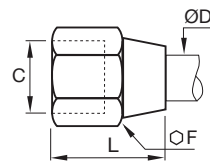
## Recommended Nut Tightening Torque

### Tightening torque in daN.m =

maximum tightening torque of a 0110 nut and 0124 olive with copper, brass or steel tube.



Nut 0110 and 0110..40



Nut 0110..60

Ø D (mm)	Ø F 0110	Ø F 0110..60	Max. daN.m Copper or Brass	Ø F 0110..40	Max. daN.m Steel
4	10	11	0.7	10	1.5
5	12	13	0.7	12	1.5
6	13	13	1.5	13	2.5
8	14	16	1.5	14	2.5
10	19	20	1.8	19	3
12	22	22	3	22	4.5
14	24	24	3.5	24	5.5
15	24	24	4	24	6
16	27	27	5	27	7
18	30	30	6	30	9
20	32	32	6	32	10
22	36	36	7	36	12
25	41	41	8	41	13
28	42		9		

## Customised Fittings

Working directly with its customers and based on its knowledge and experience, Parker Legris can design customised brass compression fittings for specific requirements using the customer's specifications.

The range of compression fittings also offers nickel chemical surface treatment in order to improve the corrosion resistance and chemical compatibility of the fittings (the model number of the fitting is then given the suffix 99).

The above recommendations are given in good faith. However, since each application is different, it is advisable to undertake tests in actual working conditions.



# Technical Characteristics

The use of Parker Legris brass compression fittings is dependant on the tube material. Tables of recommended working pressure for the different tubes are shown below.

## Recommended Tube Type

**Copper tube:** copper which has been "cold rolled", cold drawn and in straight lengths.

**Brass tube:** in cold-rolled straight lengths (same working pressure as for copper tube).

**"Coiled annealed" copper tube:** reduces working pressure by 35%; must be avoided completely if vibration is present.

**Steel tube:** "thin wall" cold drawn, seamless, bright annealed and in straight lengths.  
6 mm to 16 mm O.D.: max. wall thickness 1 mm  
Above 16 mm O.D.: max. wall thickness 1.5 mm

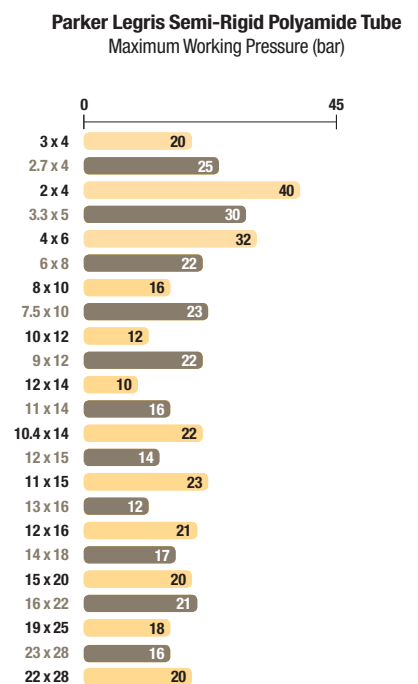
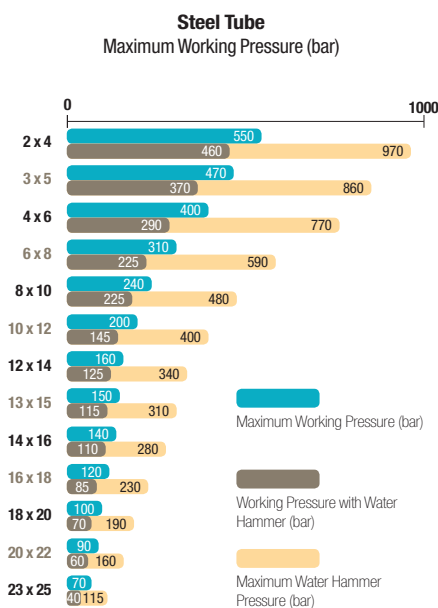
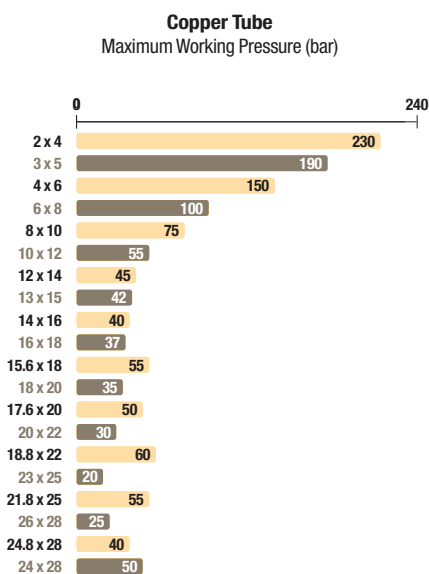
**Polyamide tube:** semi-rigid  
For rigid polyamide tube, multiply the figures in this table by 1.8.

## Recommended Tube-Fitting Assembly Configurations

Assembled using Parker Legris brass olive and nut.

Assembled using Parker Legris steel olive and nut (nut type 0110..40).

Assembled using Parker Legris brass olive and nut.



When using a plastic nut type 0110..70, the maximum working pressure is 10 bar, for all diameters.

## Working Pressure Coefficients for Semi-Rigid Polyamide Tubing

Temperature °C	-40°C / -15°C	-15°C / +30°C	+30°C / +50°C	+50°C / +70°C	+70°C / +100°C
Factor	1.8	1	0.68	0.55	0.31

Parker Legris brass compression fittings are not compatible with ammonia and its derivatives.

The above recommendations are given in good faith. However, since each application is different, it is advisable to undertake tests in actual working conditions.

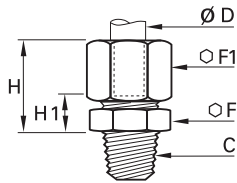
# Brass Compression Fittings

0105

Stud Fitting, Male BSPT Thread



Brass



ØD	C		F	F1	H <sub>max</sub>	H1	kg
4	R1/8	0105 04 10	10	10	17	7	0.012
	R1/8	0105 05 10	11	12	17.5	7.5	0.016
5	R1/4	0105 05 13	14	12	17.5	7.5	0.022
	R1/8	0105 06 10	11	13	18	7.5	0.017
6	R1/4	0105 06 13	14	13	18	7.5	0.024
	R3/8	0105 06 17	17	13	18	8.5	0.031
	R1/8	0105 08 10	13	14	19.5	7	0.020
8	R1/4	0105 08 13	14	14	19.5	7	0.025
	R3/8	0105 08 17	17	14	20.5	8	0.032
	R1/8	0105 10 10	17	19	24	9	0.043
10	R1/4	0105 10 13	17	19	24	9	0.047
	R3/8	0105 10 17	17	19	24	9	0.048
	R1/2	0105 10 21	22	19	25	10	0.067
	R1/4	0105 12 13	19	22	24	9	0.059
12	R3/8	0105 12 17	19	22	24	9	0.060
	R1/2	0105 12 21	22	22	25	10	0.076
	R1/4	0105 14 13	22	24	25	8	0.068
14	R3/8	0105 14 17	22	24	25	8	0.068
	R1/2	0105 14 21	22	24	26	9	0.080
	R3/4	0105 14 27	27	24	27	10	0.107
15	R3/8	0105 15 17	22	24	25	8	0.065
	R1/2	0105 15 21	22	24	26	9	0.076
	R1/4	0105 16 13	24	27	27	9.5	0.092
16	R3/8	0105 16 17	24	27	27	9.5	0.092
	R1/2	0105 16 21	24	27	27	9.5	0.099
	R3/4	0105 16 27	27	27	28	10.5	0.123
18	R1/2	0105 18 21	27	30	30	10.5	0.127
	R3/4	0105 18 27	27	30	30	10.5	0.138
	R1/2	0105 20 21	30	32	32	11	0.148
20	R3/4	0105 20 27	30	32	32	11	0.157
	R1/2	0105 22 21	32	36	33	11	0.187
	R3/4	0105 22 27	32	36	33	11	0.196
22	R1	0105 22 34	36	36	33	11	0.227
	R3/4	0105 25 27	36	41	36	11	0.261
	R1	0105 25 34	36	41	36	11	0.278
25	R3/4	0105 28 27	41	42	36	11	0.274
	R1	0105 28 34	41	42	36	11	0.283

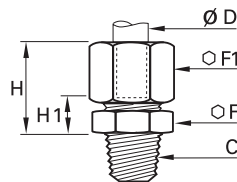
Metric taper threads or Briggs (NPT threads) are available by special order, subject to minimum quantities.

0105

Stud Fitting, Male NPT Thread



Brass



ØD	C		F	F1	H <sub>max</sub>	H1	kg
6	NPT1/8	0105 06 11	11	13	18	7.5	0.018
	NPT1/4	0105 06 14	14	13	18	7.5	0.027
8	NPT1/8	0105 08 11	13	14	21	7	0.021
	NPT1/4	0105 08 14	14	14	18.5	7	0.026
10	NPT1/4	0105 10 14	17	19	24	9	0.048
	NPT3/8	0105 10 18	17	19	24	9	0.048
	NPT1/2	0105 10 22	22	19	25	10	0.066

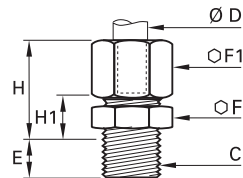
# Brass Compression Fittings

## 0101

### Stud Fitting with Captive Sealing Washer, Male BSPP and Metric Thread



Brass, technical polymer



ØD	C		E	F	F1	H <sub>max</sub>	H1	kg
4	M5x0.8	<a href="#">0101 04 19</a>	5	10	10	16.5	8	0.011
	G1/8	<a href="#">0101 04 10</a>	6.5	13	10	16.5	8	0.016
5	G1/8	<a href="#">0101 05 10</a>	6.5	13	12	17.5	8.5	0.018
	G1/8	<a href="#">0101 06 10</a>	6.5	13	13	18	8.5	0.020
6	G1/4	<a href="#">0101 06 13</a>	8	17	13	18	9.5	0.030
	G1/8	<a href="#">0101 08 10</a>	6.5	13	14	19	8.5	0.021
8	G1/4	<a href="#">0101 08 13</a>	8	17	14	19.5	9	0.032
	G3/8	<a href="#">0101 08 17</a>	11	22	14	20	10.5	0.044
10	G1/4	<a href="#">0101 10 13</a>	8	17	19	24	11	0.049
	G3/8	<a href="#">0101 10 17</a>	11	22	19	24	11.5	0.061
12	G1/4	<a href="#">0101 12 13</a>	8	19	22	24	11	0.062
	G3/8	<a href="#">0101 12 17</a>	11	22	22	24	11.5	0.069
14	G3/8	<a href="#">0101 14 17</a>	11	22	24	25	10.5	0.074
	G1/2	<a href="#">0101 14 21</a>	12	27	24	25	11	0.094
15	G3/8	<a href="#">0101 15 17</a>	11	22	24	25	10.5	0.071
	G1/2	<a href="#">0101 15 21</a>	12	27	24	25	11	0.093
16	G3/8	<a href="#">0101 16 17</a>	11	22	27	27	12	0.092
	G1/2	<a href="#">0101 16 21</a>	12	27	27	27	12.5	0.109
18	G1/2	<a href="#">0101 18 21</a>	12	27	30	29.5	12.5	0.128
	G3/4	<a href="#">0101 18 27</a>	13	32	30	29.5	13	0.152
20	G3/4	<a href="#">0101 20 27</a>	13	32	32	31	13	0.164
	G3/4	<a href="#">0101 22 27</a>	13	32	36	32	13	0.195
22	G1	<a href="#">0101 22 34</a>	15	41	36	31	13.5	0.259
	G3/4	<a href="#">0101 25 27</a>	13	36	41	35.5	13	0.261
25	G1	<a href="#">0101 25 34</a>	15	41	41	35.5	13	0.169
	G1	<a href="#">0101 28 34</a>	15	41	42	35.5	13.5	0.300

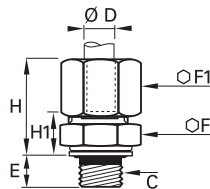
With pre-assembled captive sealing washer  
Sealing washers 0602 are shown in Chapter 9.

## 0101..39

### Stud Fitting, with Bi-Material Seal, Male BSPP



Brass, zinc-plated steel with NBR seal




ØD	C		E	F	F1	H <sub>max</sub>	H1	kg
4	G1/8	<a href="#">0101 04 10 39</a>	5.5	13	10	17.5	9	0.016
5	G1/8	<a href="#">0101 05 10 39</a>	5.5	13	12	18.5	9.5	0.019
	G1/8	<a href="#">0101 06 10 39</a>	5.5	13	13	19	9.5	0.020
6	G1/4	<a href="#">0101 06 13 39</a>	7	17	13	19	10.5	0.030
	G1/8	<a href="#">0101 08 10 39</a>	5.5	13	14	20	9.5	0.022
8	G1/4	<a href="#">0101 08 13 39</a>	7	17	14	20.5	10	0.032
	G3/8	<a href="#">0101 08 17 39</a>	9.5	22	14	21.5	12	0.045
10	G1/4	<a href="#">0101 10 13 39</a>	7	17	19	25	12	0.048
	G3/8	<a href="#">0101 10 17 39</a>	9.5	22	19	25.5	13	0.062
12	G1/4	<a href="#">0101 12 13 39</a>	7	19	22	25	12	0.063
	G3/8	<a href="#">0101 12 17 39</a>	9.5	22	22	25	13	0.071
14	G1/2	<a href="#">0101 12 21 39</a>	10.5	27	22	25	13.5	0.091
	G3/8	<a href="#">0101 14 17 39</a>	9.5	22	24	26.5	12	0.075
14	G1/2	<a href="#">0101 14 21 39</a>	10.5	27	24	26.5	12.5	0.095
	G3/8	<a href="#">0101 15 17 39</a>	9.5	22	24	26.5	12	0.073
15	G1/2	<a href="#">0101 15 21 39</a>	10.5	27	24	26.5	12.5	0.095
	G3/8	<a href="#">0101 16 17 39</a>	9.5	22	27	28.5	13.5	0.092
16	G1/2	<a href="#">0101 16 21 39</a>	10.5	27	27	28.5	14	0.111
	G1/2	<a href="#">0101 18 21 39</a>	10.5	27	30	31	14	0.129
18	G3/4	<a href="#">0101 18 27 39</a>	11.5	32	30	31	14.5	0.155
	G3/4	<a href="#">0101 20 27 39</a>	11.5	32	32	32.5	14.5	0.164
22	G3/4	<a href="#">0101 22 27 39</a>	11.5	32	36	32.5	14.5	0.197
	G1	<a href="#">0101 22 34 39</a>	13	41	36	33	15.5	0.259
25	G1	<a href="#">0101 25 34 39</a>	13	41	41	37.5	15.5	0.309
	G1	<a href="#">0101 28 34 39</a>	13	41	42	37.5	15.5	0.301


Thread with bi-material seal  
Bi-material sealing washers, part number 0139, can be found in Chapter 9

# Brass Compression Fittings

## 0101 Stud Fitting, Male Metric Thread


ØD	C		E	F	F1	H max	H1	kg
4	M7x1	<a href="#">0101 04 55</a>	6.5	10	10	16.5	7.5	0.012
	M8x1	<a href="#">0101 04 56</a>	6.5	11	10	16.5	7.5	0.013
5	M8x1	<a href="#">0101 05 56</a>	6.5	11	12	17.5	8	0.016
	M10x1	<a href="#">0101 05 60</a>	6.5	14	12	17.5	8.5	0.020
6	M10x1	<a href="#">0101 06 60</a>	6.5	14	13	18	8.5	0.021
	M10x1.5	<a href="#">0101 06 62</a>	6.5	14	13	18	8.5	0.021
8	M12x1	<a href="#">0101 08 65</a>	8	17	14	19.5	9	0.029
	M12x1.25	<a href="#">0101 08 66</a>	8	17	14	19.5	9	0.029
	M13x1.25	<a href="#">0101 08 68</a>	8	17	14	19.5	9	0.030
10	M14x1.25	<a href="#">0101 10 70</a>	8	17	19	24	11	0.047
	M14x1.5	<a href="#">0101 10 71</a>	8	17	19	24	11	0.047
	M16x1.25	<a href="#">0101 10 74</a>	9	19	19	24	11	0.051
12	M16x1.5	<a href="#">0101 10 75</a>	9	19	19	24	11	0.051
	M18x1.5	<a href="#">0101 10 78</a>	9	22	19	24	11.5	0.060
	M16x1.25	<a href="#">0101 12 74</a>	9	19	22	24	11	0.061
14	M16x1.5	<a href="#">0101 12 75</a>	9	19	22	24	11	0.061
	M18x1.5	<a href="#">0101 12 78</a>	9	22	22	24	11.5	0.070
	M18x1.5	<a href="#">0101 14 78</a>	9	22	24	25	10.5	0.077
15	M20x1.5	<a href="#">0101 14 80</a>	10	24	24	25	11	0.084
	M18x1.5	<a href="#">0101 15 78</a>	9	22	24	25	10.5	0.071
16	M20x1.5	<a href="#">0101 16 80</a>	10	24	27	27	12.5	0.102
	M22x1.5	<a href="#">0101 16 82</a>	10	27	27	27	12.5	0.111
18	M22x1.5	<a href="#">0101 18 82</a>	10	27	30	29.5	12.5	0.129
	M24x1.5	<a href="#">0101 18 83</a>	11	30	30	29.5	13	0.142

## 0114 Stud Fitting, Female BSPP Thread

ØD	C		E	F	F1	H max	H1	kg
4	G1/8	<a href="#">0114 04 10</a>	9.5	14	10	26	16.5	0.020
	G1/4	<a href="#">0114 04 13</a>	13.5	17	10	30	20.5	0.030
5	G1/8	<a href="#">0114 05 10</a>	9.5	14	12	28	17	0.023
	G1/4	<a href="#">0114 05 13</a>	13.5	17	12	31	21	0.033
6	G1/8	<a href="#">0114 06 10</a>	9.5	14	13	28	17	0.025
	G1/4	<a href="#">0114 06 13</a>	13.5	17	13	32	21	0.034
8	G3/8	<a href="#">0114 06 17</a>	14	22	13	32	21.5	0.051
	G1/8	<a href="#">0114 08 10</a>	9.5	14	14	29	16.5	0.026
	G1/4	<a href="#">0114 08 13</a>	13.5	17	14	33	20.5	0.036
10	G3/8	<a href="#">0114 08 17</a>	14	22	14	34	21	0.052
	G1/4	<a href="#">0114 10 13</a>	13.5	17	19	37	21.5	0.052
	G1/2	<a href="#">0114 10 21</a>	18.5	27	19	42	26.5	0.099
12	G1/4	<a href="#">0114 12 13</a>	13.5	19	22	36	20.5	0.069
	G3/8	<a href="#">0114 12 17</a>	14	22	22	37	22	0.078
	G1/2	<a href="#">0114 12 21</a>	18.5	27	22	42	26.5	0.109
14	G1/4	<a href="#">0114 14 13</a>	13.5	22	24	36	18.5	0.085
	G3/8	<a href="#">0114 14 17</a>	14	22	24	38	21	0.048
	G1/2	<a href="#">0114 14 21</a>	18.5	27	24	43	25.5	0.113
15	G3/8	<a href="#">0114 15 17</a>	14	22	24	38	21	0.078
	G1/2	<a href="#">0114 15 21</a>	18.5	27	24	43	25.5	0.109
	G1/4	<a href="#">0114 16 13</a>	13.5	24	27	36	18	0.107
16	G3/8	<a href="#">0114 16 17</a>	14	24	27	38	20.5	0.106
	G1/2	<a href="#">0114 16 21</a>	18.5	27	27	44	26	0.127
	G3/8	<a href="#">0114 18 17</a>	14	27	30	39	19.5	0.140
18	G1/2	<a href="#">0114 18 21</a>	18.5	27	30	45	26	0.144
	G3/4	<a href="#">0114 18 27</a>	19.5	32	30	46	27	0.165
	G3/8	<a href="#">0114 20 17</a>	14	30	32	38	18	0.161
20	G1/2	<a href="#">0114 20 21</a>	18.5	30	32	44.5	24	0.173
	G3/4	<a href="#">0114 20 27</a>	19.5	32	32	47	26.5	0.170
22	G3/4	<a href="#">0114 22 27</a>	19.5	32	36	48	26.5	0.204
25	G3/4	<a href="#">0114 25 27</a>	19.5	36	41	50.5	26	0.297


# Brass Compression Fittings

## 0109 Stud Elbow, Male BSPT Thread


ØD	C		F	H	J	L max	L1	kg
4	R1/8	<a href="#">0109 04 10</a>	10	17	8	19	9.5	0.016
	R1/4	<a href="#">0109 04 13</a>	10	20	10	19	11	0.026
5	R1/8	<a href="#">0109 05 10</a>	12	17.5	8	21	11	0.019
	R1/4	<a href="#">0109 05 13</a>	12	21.5	10	22	12	0.028
6	R1/8	<a href="#">0109 06 10</a>	13	18	8	22	11	0.021
	R1/4	<a href="#">0109 06 13</a>	13	21.5	10	22	12	0.031
8	R1/8	<a href="#">0109 08 10</a>	14	18.5	10	28	15	0.028
	R1/4	<a href="#">0109 08 13</a>	14	22	10	28	15	0.033
8	R3/8	<a href="#">0109 08 17</a>	14	24	12	28	15	0.044
	R1/4	<a href="#">0109 10 13</a>	19	25	12	30	14.5	0.052
10	R3/8	<a href="#">0109 10 17</a>	19	25.5	12	30	14.5	0.060
	R1/2	<a href="#">0109 10 21</a>	19	32	19	36	21	0.109
12	R1/4	<a href="#">0109 12 13</a>	22	26	15	30	15	0.074
	R3/8	<a href="#">0109 12 17</a>	22	27	15	30	15	0.077
14	R1/2	<a href="#">0109 12 21</a>	22	32	19	36	21	0.116
	R3/8	<a href="#">0109 14 17</a>	24	30	19	35	18	0.105
15	R1/2	<a href="#">0109 14 21</a>	24	32	19	35	18	0.112
	R3/8	<a href="#">0109 15 17</a>	24	30	19	35	18	0.099
16	R1/2	<a href="#">0109 15 21</a>	24	32	19	35	18	0.106
	R3/8	<a href="#">0109 16 17</a>	27	30	19	39	21	0.120
18	R1/2	<a href="#">0109 16 21</a>	27	33.5	19	39	21	0.130
	R3/4	<a href="#">0109 16 27</a>	27	36.5	23	41	23	0.189
20	R1/2	<a href="#">0109 18 21</a>	30	35.5	23	41	21.5	0.182
	R3/4	<a href="#">0109 18 27</a>	30	36.5	23	41	21.5	0.199
22	R1/2	<a href="#">0109 20 21</a>	32	36.5	23	42	21.5	0.181
	R3/4	<a href="#">0109 20 27</a>	32	38	23	42	21.5	0.200
25	R3/4	<a href="#">0109 22 27</a>	36	40	27	50	30	0.288
	R1	<a href="#">0109 22 34</a>	36	44	27	50	30	0.342
28	R3/4	<a href="#">0109 25 27</a>	41	43	27	54	30	0.325
	R1	<a href="#">0109 25 34</a>	41	44	27	54	30	0.367
28	R3/4	<a href="#">0109 28 27</a>	42	46	32	54	30	0.402
	R1	<a href="#">0109 28 34</a>	42	48	32	54	30	0.384

Metric taper threads or Briggs (NPT threads) are available by special order, subject to minimum quantities.

## 0109 Stud Elbow, Male NPT Thread

ØD	C		F	H	J	L max	L1	kg
6	NPT1/8	<a href="#">0109 06 11</a>	13	18	8	22	11	0.021
	NPT1/4	<a href="#">0109 06 14</a>	13	21.5	10	22	12	0.030
8	NPT1/8	<a href="#">0109 08 11</a>	14	18.5	10	28	15	0.028
	NPT1/4	<a href="#">0109 08 14</a>	14	22	10	28	15	0.033
10	NPT1/4	<a href="#">0109 10 14</a>	19	25	12	30	14.5	0.053

## 0199 Stud Orientable Elbow, Male BSP Thread

ØD	C		F	F1	H	H1	H1 max	J	L max	L1	kg
4	G1/8	<a href="#">0199 04 10</a>	14	10	23	16	17	8	19	9.5	0.023
	G1/4	<a href="#">0199 04 13</a>	19	10	30.5	22	23.5	10	19	11	0.043
6	G1/8	<a href="#">0199 06 10</a>	14	13	23	16	17	8	22	11	0.027
	G1/4	<a href="#">0199 06 13</a>	19	13	30.5	22	23.5	10	22	12	0.047
8	G1/8	<a href="#">0199 08 10</a>	14	14	24	17	18	10	28	15	0.033
	G1/4	<a href="#">0199 08 13</a>	19	14	30.5	22	23.5	10	28	15	0.051
8	G3/8	<a href="#">0199 08 17</a>	22	14	33.5	24	25.5	12	28	15	0.065
	G1/4	<a href="#">0199 10 13</a>	19	19	31	22.5	24	12	30	14.5	0.068
10	G3/8	<a href="#">0199 10 17</a>	22	19	33.5	24	25.5	12	30	14.5	0.079
	G1/2	<a href="#">0199 10 21</a>	27	19	40	29.5	31	19	37	22	0.138
14	G3/8	<a href="#">0199 14 17</a>	22	24	35.5	26	27.5	19	35	18	0.119
	G1/2	<a href="#">0199 14 21</a>	27	24	40	29.5	31	19	35	18	0.141
18	G1/2	<a href="#">0199 18 21</a>	27	30	40	29	30.5	23	41	21.5	0.187
	G3/4	<a href="#">0199 18 27</a>	32	30	43.5	32	33.5	23	41	21.5	0.222
22	G3/4	<a href="#">0199 22 27</a>	32	36	45.5	34	36	32	51	31	0.382
	G1	<a href="#">0199 22 34</a>	41	36	54	40.5	43	32	51	31	0.408
28	G1	<a href="#">0199 28 34</a>	41	42	54	40.5	43	32	54	30	0.420


The body will orientate for positioning purposes



# Brass Compression Fittings

**0108**


Stud Branch Tee, Male BSPT Thread

Brass		ØD	C		F	H	J	L1	L/2	kg
4	R1/8	0108 04 10	10	17	8	9.5	19	0.025		
	R1/8	0108 05 10	12	17.5	8	11	21	0.017		
6	R1/8	0108 06 10	13	18	8	11	22	0.032		
	R1/4	0108 06 13	13	21.5	10	16	27	0.047		
8	R1/8	0108 08 10	14	18.5	10	15	28	0.045		
	R1/4	0108 08 13	14	22	10	15	28	0.050		
10	R1/4	0108 10 13	19	25	12	14.5	30	0.084		
	R3/8	0108 10 17	19	25.5	12	14.5	30	0.090		
12	R1/4	0108 12 13	22	26	15	15	30	0.116		
	R3/8	0108 12 17	22	27	15	15	30	0.117		
14	R3/8	0108 14 17	24	30	19	18	35	0.153		
	R1/2	0108 14 21	24	32	19	18	35	0.168		
15	R3/8	0108 15 17	24	30	19	18	35	0.145		
	R1/2	0108 15 21	24	32	19	18	35	0.155		
16	R3/8	0108 16 17	27	30	19	21	39	0.190		
	R1/2	0108 16 21	27	33.5	19	21	39	0.203		
18	R1/2	0108 18 21	30	35.5	23	21.5	41	0.265		
	R3/4	0108 18 27	30	36.5	23	21.5	41	0.292		
20	R3/4	0108 20 27	32	38	23	21.5	42	0.298		
	R3/4	0108 22 27	36	40	27	29	50	0.435		
22	R1	0108 22 34	36	44	27	29	50	0.466		

Metric taper threads or Briggs (NPT threads) are available by special order, subject to minimum quantities.

**0103**

Stud Run Tee, Male BSPT Thread

Brass		ØD	C		F	H <sub>max</sub>	H1	H2	J	kg
4	R1/8	0103 04 10	10	19	17	9.5	8	0.025		
	R1/8	0103 05 10	12	21	17.5	11	8	0.030		
6	R1/8	0103 06 10	13	22	18	11	8	0.033		
	R1/4	0103 06 13	13	27	21.5	16	10	0.048		
8	R1/8	0103 08 10	14	28	18.5	15	10	0.045		
	R1/4	0103 08 13	14	28	22	15	10	0.050		
10	R3/8	0103 08 17	14	28	24	15	12	0.061		
	R1/4	0103 10 13	19	30	25	14.5	12	0.084		
12	R3/8	0103 10 17	19	30	25.5	14.5	12	0.092		
	R1/4	0103 12 13	22	30	26	15	15	0.114		
14	R3/8	0103 12 17	22	30	27	15	15	0.120		
	R3/8	0103 14 17	24	35	30	18	19	0.161		
15	R1/2	0103 14 21	24	35	32	18	19	0.169		
	R3/8	0103 15 17	24	35	30	18	19	0.148		
16	R1/2	0103 15 21	24	35	32	18	19	0.158		
	R3/8	0103 16 17	27	39	30	21	19	0.192		
18	R1/2	0103 16 21	27	39	33.5	21	19	0.199		
	R1/2	0103 18 21	30	41	35.5	21.5	23	0.269		
20	R3/4	0103 18 27	30	41	36.5	21.5	23	0.282		
	R3/4	0103 20 27	32	42	38	21.5	23	0.298		
22	R3/4	0103 22 27	36	50	40	29	27	0.435		

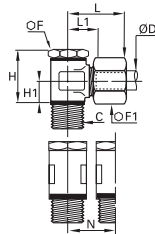
Metric taper threads or Briggs (NPT threads) are available by special order, subject to minimum quantities.

# Brass Compression Fittings

## 0118 Single Banjo, with Captive Sealing Washer, Male BSPP Thread



Brass, technical polymer



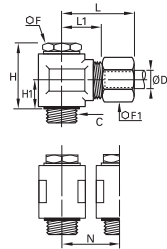
ØD	C		F	F1	H	H1	L <sub>max</sub>	L1	N	kg
4	G1/8	<a href="#">0118 04 10</a>	14	10	24	9.5	24	14.5	17.5	0.038
	G1/8	<a href="#">0118 05 10</a>	14	12	24	9.5	25	14.5	17.5	0.041
5	G1/4	<a href="#">0118 05 13</a>	17	12	25	10	26	16	21	0.058
	G1/8	<a href="#">0118 06 10</a>	14	13	24	9.5	25	14.5	17.5	0.041
6	G1/4	<a href="#">0118 06 13</a>	17	13	25	10	26	16	21	0.056
	G1/8	<a href="#">0118 08 10</a>	14	14	24	9.5	28	15.5	17.5	0.054
8	G1/4	<a href="#">0118 08 13</a>	17	14	25	10	28	15.5	21	0.057
	G3/8	<a href="#">0118 08 17</a>	22	14	32	13	30	18	26.5	0.111
10	G1/4	<a href="#">0118 10 13</a>	17	19	31	13	34	19	23	0.120
	G3/8	<a href="#">0118 10 17</a>	22	19	32	13	34	19	26.5	0.129
12	G1/4	<a href="#">0118 12 13</a>	17	22	34	14.5	34	19	23	0.126
	G3/8	<a href="#">0118 12 17</a>	22	22	35	14.5	34	19	26.5	0.133
14	G1/4	<a href="#">0118 14 13</a>	17	24	37	16	37	20.5	28	0.154
	G3/8	<a href="#">0118 14 17</a>	22	24	38	16	37	20.5	28	0.195
15	G1/2	<a href="#">0118 14 21</a>	27	24	40	16	38	20.5	32.5	0.208
	G3/8	<a href="#">0118 15 17</a>	22	24	38	16	37	20.5	28	0.190
16	G1/2	<a href="#">0118 15 21</a>	27	24	40	16	38	20.5	32.5	0.198
	G1/2	<a href="#">0118 16 21</a>	27	27	42	16	38	21	32.5	0.221
18	G1/2	<a href="#">0118 18 21</a>	27	30	46	19.5	43	24.5	36	0.366
	G3/4	<a href="#">0118 20 27</a>	32	32	49	20	44	24.5	39	0.403
22	G3/4	<a href="#">0118 22 27</a>	32	36	53	22	45	24.5	39	0.459

With pre-assembled captive sealing washer  
Sealing washers 0602 can be found in Chapter 9.

## 0118..39 Single Banjo with Bi-Material Seal, Male BSPP Thread



Brass, zinc-plated steel with NBR seal




ØD	C		F	F1	H	H1	L <sub>max</sub>	L1	N	kg
4	G1/8	<a href="#">0118 04 10 39</a>	14	10	23	9.5	24	14.5	17.5	0.038
	G1/8	<a href="#">0118 05 10 39</a>	14	12	23	9.5	25	14.5	17.5	0.041
5	G1/4	<a href="#">0118 05 13 39</a>	17	12	24	10	26	16	21	0.064
	G1/8	<a href="#">0118 06 10 39</a>	14	13	23	9.5	25	14.5	17.5	0.042
6	G1/4	<a href="#">0118 06 13 39</a>	17	13	24	10	26	16	21	0.057
	G1/8	<a href="#">0118 08 10 39</a>	14	14	23	9.5	28	15.5	17.5	0.055
8	G1/4	<a href="#">0118 08 13 39</a>	17	14	24	10	28	15.5	21	0.058
	G3/8	<a href="#">0118 08 17 39</a>	22	14	31.5	13.5	30	18	26.5	0.113
10	G1/4	<a href="#">0118 10 13 39</a>	17	19	30	13	34	19	23	0.118
	G3/8	<a href="#">0118 10 17 39</a>	22	19	31.5	13.5	34	19	26.5	0.128
12	G1/4	<a href="#">0118 12 13 39</a>	17	22	33	14.5	34	19	23	0.128
	G3/8	<a href="#">0118 12 17 39</a>	22	22	34.5	15	34	19	26.5	0.140
14	G1/4	<a href="#">0118 14 13 39</a>	17	24	36	16	37	20.5	28	0.189
	G3/8	<a href="#">0118 14 17 39</a>	22	24	37.5	16.5	37	20.5	28	0.198
15	G1/2	<a href="#">0118 14 21 39</a>	27	24	39	16.5	38	20.5	32.5	0.205
	G3/8	<a href="#">0118 15 17 39</a>	22	24	37.5	16.5	37	20.5	28	0.389
16	G1/2	<a href="#">0118 15 21 39</a>	27	24	40	16.5	38	20.5	32.5	0.202
	G1/2	<a href="#">0118 16 21 39</a>	27	27	40	16.5	38	21	32.5	0.225
18	G1/2	<a href="#">0118 18 21 39</a>	27	30	47	20	43	24.5	36	0.369
	G3/4	<a href="#">0118 20 27 39</a>	32	32	50	20.5	44	24.5	39	0.394
22	G3/4	<a href="#">0118 22 27 39</a>	32	36	54	22.5	45	24.5	39	0.462

With bi-material sealing washer  
Bi-material sealing washers, part number 0139, can be found in Chapter 9.


# Brass Compression Fittings

## 0119 Double Banjo with Captive Sealing Washer, Male BSPP Thread

ØD	C		F	F1	H	H1	L1	L/2	N	kg
4	G1/8	<a href="#">0119 04 10</a>	14	10	24	9.5	14.5	24	17.5	0.049
	G1/8	<a href="#">0119 06 10</a>	14	13	24	9.5	14.5	25	17.5	0.056
6	G1/4	<a href="#">0119 06 13</a>	17	13	25	10	16	26.5	21	0.038
	G1/8	<a href="#">0119 08 10</a>	14	14	24	9.5	15.5	28	17.5	0.069
8	G1/4	<a href="#">0119 08 13</a>	17	14	25	10	15.5	28	21	0.074
	G3/8	<a href="#">0119 08 17</a>	22	14	32	13	18	30.5	26.5	0.140
10	G1/4	<a href="#">0119 10 13</a>	17	19	31	13	19	34	23	0.156
	G3/8	<a href="#">0119 10 17</a>	22	19	32	13	19	34	26.5	0.165
12	G1/4	<a href="#">0119 12 13</a>	17	22	34	14.5	19	34	23	0.180
	G3/8	<a href="#">0119 12 17</a>	22	22	35	14.5	19	34	26.5	0.182
14	G1/4	<a href="#">0119 14 13</a>	17	24	37	16	20.5	37.5	28	0.246
	G3/8	<a href="#">0119 14 17</a>	22	24	38	16	20.5	37.5	28	0.247
	G1/2	<a href="#">0119 14 21</a>	27	24	40	16	20.5	38	32.5	0.219


Thread with pre-assembled washer  
Sealing washers 0602 can be found in Chapter 9.

## 0119..39 Double Banjo with Bi-Material Seal, Male BSPP Thread

ØD	C		F	F1	H	H1	L1	L/2	N	kg
4	G1/8	<a href="#">0119 04 10 39</a>	14	10	23	9.5	14.5	24	17.5	0.050
	G1/8	<a href="#">0119 05 10 39</a>	14	12	23	9.5	14.5	25	17.5	0.049
5	G1/4	<a href="#">0119 05 13 39</a>	17	12	24	10	126	26	21	0.072
	G1/8	<a href="#">0119 06 10 39</a>	14	13	23	9.5	14.5	25	17.5	0.056
6	G1/4	<a href="#">0119 06 13 39</a>	17	13	24	10	16	26	21	0.071
	G1/8	<a href="#">0119 08 10 39</a>	14	14	23	9.5	15.5	28	17.5	0.072
8	G1/4	<a href="#">0119 08 13 39</a>	17	14	24	10	15.5	28	21	0.080
	G3/8	<a href="#">0119 08 17 39</a>	22	14	31.5	13.5	18	30	26.5	0.118
10	G1/4	<a href="#">0119 10 13 39</a>	17	19	30	13	19	34	23	0.156
	G3/8	<a href="#">0119 10 17 39</a>	22	19	31.5	13.5	19	34	26.5	0.167
12	G1/4	<a href="#">0119 12 13 39</a>	17	22	33	14.5	19	34	23	0.180
	G3/8	<a href="#">0119 12 17 39</a>	22	22	34.5	15	19	34	26.5	0.183
14	G1/4	<a href="#">0119 14 13 39</a>	17	24	36	16	20.5	37	28	0.248
	G3/8	<a href="#">0119 14 17 39</a>	22	24	37.5	16.5	20.5	37	28	0.247
15	G1/2	<a href="#">0119 14 21 39</a>	27	24	39	16.5	20.5	38	32.5	0.262
	G3/8	<a href="#">0119 15 17 39</a>	22	24	37.5	16.5	20.5	37	28	0.246
18	G1/2	<a href="#">0119 15 21 39</a>	27	24	40	16.5	20.5	38	32.5	0.251
	G1/2	<a href="#">0119 18 21 39</a>	27	30	47	20	24.5	43	36	0.469
20	G3/4	<a href="#">0119 20 27 39</a>	32	32	50	20.5	24.5	44	39	0.638
	G3/4	<a href="#">0119 22 27 39</a>	32	36	54	22.5	24.5	45	39	0.610

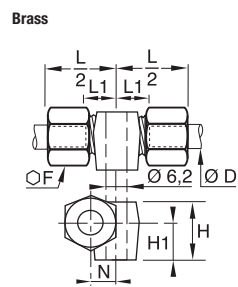
Thread with pre-assembled washer  
Bi-material sealing washers, part number 0139, can be found in Chapter 9.

## 0106 Equal Tube-to-Tube Connector

ØD		F	F1	L <sub>max</sub>	L1	kg
4	<a href="#">0106 04 00</a>	10	10	28	10	0.016
5	<a href="#">0106 05 00</a>	11	12	31	11	0.023
6	<a href="#">0106 06 00</a>	11	13	32	11	0.026
8	<a href="#">0106 08 00</a>	13	14	36	10	0.031
10	<a href="#">0106 10 00</a>	17	19	42	13	0.070
12	<a href="#">0106 12 00</a>	19	22	42	13	0.092
14	<a href="#">0106 14 00</a>	22	24	45	11	0.104
15	<a href="#">0106 15 00</a>	22	24	45	11	0.097
16	<a href="#">0106 16 00</a>	24	27	48	13	0.141
18	<a href="#">0106 18 00</a>	27	30	53	14	0.186
20	<a href="#">0106 20 00</a>	30	32	56	14	0.211
22	<a href="#">0106 22 00</a>	32	36	60	14	0.283
25	<a href="#">0106 25 00</a>	36	41	64	14	0.396
28	<a href="#">0106 28 00</a>	41	42	64	14	0.399

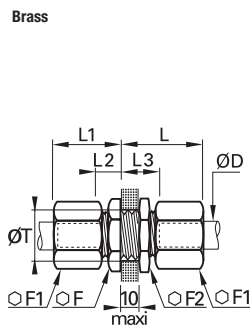
# Brass Compression Fittings

## 0113 Equal Tube-to-Tube Connector with Mounting Boss



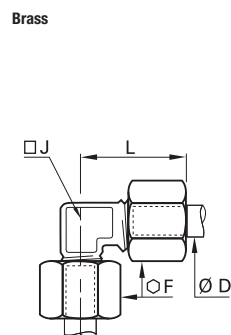
ØD		F	H	H1	L1	L/2	N	kg
4	<a href="#">0113 04 00</a>	10	10.5	7	9.5	19	6	0.022
6	<a href="#">0113 06 00</a>	13	13	9	10	20.5	7	0.033
8	<a href="#">0113 08 00</a>	14	14.5	9.5	11	23.5	8	0.041
10	<a href="#">0113 10 00</a>	19	19.5	12.5	11	26	9	0.082
12	<a href="#">0113 12 00</a>	22	22	14	12	26.5	11	0.107
14	<a href="#">0113 14 00</a>	24	25	16	11	28	12	0.122

## 0116 Equal Bulkhead Connector



ØD		F	F1	F2	L max	L1 max	L2	L3	ØT min	kg
4	<a href="#">0116 04 00</a>	10	10	13	27	17	7	17	8.3	0.024
5	<a href="#">0116 05 00</a>	13	12	14	28	18	7.5	17.5	10.3	0.035
6	<a href="#">0116 06 00</a>	13	13	14	28	19	7.5	17.5	10.3	0.037
8	<a href="#">0116 08 00</a>	14	14	17	29	20	7	17	12.3	0.045
10	<a href="#">0116 10 00</a>	19	19	22	33	25	9	19	16.5	0.101
12	<a href="#">0116 12 00</a>	22	22	22	33	25	9	19	18.5	0.121
14	<a href="#">0116 14 00</a>	24	24	24	35	25	8	18	20.5	0.145
15	<a href="#">0116 15 00</a>	24	24	24	35	25	8	18	20.5	0.134
16	<a href="#">0116 16 00</a>	27	27	27	36	28	9.5	19.5	22.5	0.189
18	<a href="#">0116 18 00</a>	27	30	30	40	30	10.5	20.5	24.5	0.237
20	<a href="#">0116 20 00</a>	32	30	32	41	31	11	21	27.5	0.274
22	<a href="#">0116 22 00</a>	36	36	36	42	32	11	21	30.5	0.372
25	<a href="#">0116 25 00</a>	36	41	38	46	36	11	21	33.5	0.469


## 0102 Equal Elbow




ØD		F	J	L max	kg
4	<a href="#">0102 04 00</a>	10	5	19	0.016
5	<a href="#">0102 05 00</a>	12	8	21	0.024
6	<a href="#">0102 06 00</a>	13	8	22	0.027
8	<a href="#">0102 08 00</a>	14	10	28	0.038
10	<a href="#">0102 10 00</a>	19	12	30	0.073
12	<a href="#">0102 12 00</a>	22	15	30	0.098
14	<a href="#">0102 14 00</a>	24	19	35	0.133
15	<a href="#">0102 15 00</a>	24	19	35	0.122
16	<a href="#">0102 16 00</a>	27	19	39	0.164
18	<a href="#">0102 18 00</a>	30	23	41	0.231
20	<a href="#">0102 20 00</a>	32	23	42	0.233
22	<a href="#">0102 22 00</a>	36	27	50	0.371
25	<a href="#">0102 25 00</a>	41	27	54	0.446
28	<a href="#">0102 28 00</a>	42	32	54.5	0.478

# Brass Compression Fittings


## 0104 Equal Tee

ØD						kg
		F	H	J	L/2	
4	<a href="#">0104 04 00</a>	10	9.5	8	19	0.028
5	<a href="#">0104 05 00</a>	12	11	8	21	0.036
6	<a href="#">0104 06 00</a>	13	11	8	22	0.040
8	<a href="#">0104 08 00</a>	14	15	10	28	0.055
10	<a href="#">0104 10 00</a>	19	14.5	12	30	0.105
12	<a href="#">0104 12 00</a>	22	15	15	30	0.142
14	<a href="#">0104 14 00</a>	24	18	19	35	0.190
15	<a href="#">0104 15 00</a>	24	18	19	35	0.175
16	<a href="#">0104 16 00</a>	27	21	19	39	0.239
18	<a href="#">0104 18 00</a>	30	21.5	23	41	0.330
20	<a href="#">0104 20 00</a>	32	21.5	23	42	0.330
22	<a href="#">0104 22 00</a>	36	29	27	50	0.518
25	<a href="#">0104 25 00</a>	41	29	27	54	0.630
28	<a href="#">0104 28 00</a>	42	30	32	55	0.660

## 0142 Equal Y Piece with Mounting Boss

ØD		F	H <sub>max</sub>	H <sub>1</sub>	L <sub>max</sub>	L <sub>1</sub>	ØT	Kg
		4	<a href="#">0142 04 00</a>	10	16.5	7	26.5	
6	<a href="#">0142 06 00</a>	13	19.5	8.5	28	17	4.2	0.049
8	<a href="#">0142 08 00</a>	14	21	8	30	17	6.2	0.061
10	<a href="#">0142 10 00</a>	19	24.5	9	37.5	22	6.2	0.128
12	<a href="#">0142 12 00</a>	22	26	11	38	23	6.2	0.110
14	<a href="#">0142 14 00</a>	24	28	11	41.5	24.5	6.2	0.201
15	<a href="#">0142 15 00</a>	24	28	11	41.5	24.5	6.2	0.204
16	<a href="#">0142 16 00</a>	27	30	12	43	25	6.2	0.252
18	<a href="#">0142 18 00</a>	30	31.5	12	50.5	31	10.2	0.220
25	<a href="#">0142 25 00</a>	41	39	14	59	34	10.2	0.728

## 0107 Equal Cross

ØD						Kg
		F	H	J	L/2	
4	<a href="#">0107 04 00</a>	10	9.5	8	19	0.035
5	<a href="#">0107 05 00</a>	12	11	8	21	0.047
6	<a href="#">0107 06 00</a>	13	11	8	22	0.052
8	<a href="#">0107 08 00</a>	14	15	11	28	0.073
10	<a href="#">0107 10 00</a>	19	14.5	14	30	0.142
12	<a href="#">0107 12 00</a>	22	15	15	35	0.096
14	<a href="#">0107 14 00</a>	24	18	20	35	0.246
15	<a href="#">0107 15 00</a>	24	18	20	35	0.227
16	<a href="#">0107 16 00</a>	27	21	20	39	0.312
18	<a href="#">0107 18 00</a>	30	21.5	25	41	0.426
20	<a href="#">0107 20 00</a>	32	21.5	25	42	0.429
22	<a href="#">0107 22 00</a>	36	29	27	50	0.676
25	<a href="#">0107 25 00</a>	41	29	27	50	0.819

# Complementary Brass Fittings

## Reducers, Olives and Nuts

This innovative reducer system, using a full range of nuts and olives, enables **different diameters** of steel, copper, brass or polymer tubes to be fitted onto **a single Parker Legris compression fitting**.

### Product Advantages

#### Efficient Solution

Reduces envelope dimensions  
 Quick and easy to assemble, whatever the diameters and tube material  
 Improved stock management  
 Silicone-free

#### Multiple Combinations

A single connector for up to 4 different tube materials and sizes  
 Example:
 

- polymer tube 4 mm O.D.
- copper tube 8 mm O.D.
- brass tube 12 mm O.D.
- braided PVC hose 12 mm I.D.

 A full range of olives and nuts to optimise all assembly operations



Pneumatics  
 Cooling  
 Automotive Process  
 Lubrication  
 Fluid Transmission  
 Packaging  
 Industrial Machinery

**Applications**

#### Regulations

DI: 97/23/EC (PED)  
 RG: 1907/2006 (REACH)  
 DI: 2002/95/EC (RoHS)  
 DI: 94/9/EC (ATEX)

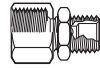
### Reducer Assembly Procedure

Operation	Assembly Sequence	Assembled Fitting
<p><b>1</b>  <b>Assemble the reducer</b>                      Place the reducer in the fitting body.</p>	<p><b>1</b></p>	
<p><b>2</b>  <b>Assemble the nut and olive</b>                      Place the nut and then the olive onto the tube.</p>	<p><b>2</b></p>	
<p><b>3</b>  <b>Assemble the nut</b>                      Push the tubing into the fitting until it butts against the tube reducer. Tighten the nut to the recommended torque (see opposite page).</p>	<p><b>3</b></p>	

# Complementary Brass Fittings

## Assembly Configuration

The table and information given below illustrate the large number of options available with Parker Legris brass compression fittings. To these must be added the advantages specific to the original Parker Legris reducer shown on the previous page.



Brass Body

0110 Brass			0110..60 Brass		0110..40 Steel		0110..70* Polymer	
	0124 Brass	0111 BNA** Brass	0124 Brass	0111 BNA** Brass	0124...40 Steel			
No olive required to assemble the plug							No olive required to assemble the tube	
Brass plug: <b>0126</b>	Copper, cold-rolled brass, polymer tube and barb connectors <b>0122</b> and <b>0165</b>	Coiled annealed copper tube	Cold-rolled copper tube for vibration and side loading, etc.	Coiled annealed copper tube for vibration and side loading, etc.	Steel or copper tube: low/medium hydraulic pressure, lubricate before assembly		Polymer tube	

### \*Assembly specifications for nut-olive 0110 ..70

This part functions as both olive and nut for flexible polymer tube assemblies:

1. Hand tighten the polymer nut-olive a few turns onto the body of the fitting; the knurling makes this easier.
2. Then introduce the polymer tube and push home into the body of the fitting.
3. Continue manually tightening the polymer nut-olive.
4. Finish tightening using a spanner until the nut body disengages and turns freely, which acts as a torque limiter.

**N.B.:** To avoid damaging the threads, do not insert the tube before hand tightening the nut-olive into the body of the fitting.

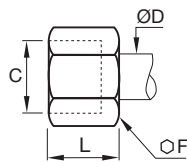
\*\*Bureau de Normalisation de l'Automobile (French Automotive Bureau of Standards)

### Recommended Tightening Torque

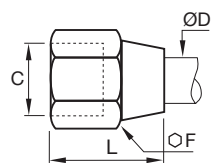
#### Tightening torque in daN.m =

maximum tightening torque of a **0110** nut and **0124** olive with copper, brass or steel tube.

Nut **0110** and **0110..40**



Nut **0110..60**



Ø D (mm)	Ø F 0110	Ø F 0110..60	max. daN.m copper or brass	Ø F 0110..40	max. daN.m steel
4	10	11	0.7	10	1.5
5	12	13	0.7	12	1.5
6	13	13	1.5	13	2.5
8	14	16	1.5	14	2.5
10	19	20	1.8	19	3
12	22	22	3	22	4.5
14	24	24	3.5	24	5.5
15	24	24	4	24	6
16	27	27	5	27	7
18	30	30	6	30	9
20	32	32	6	32	10
22	36	36	7	36	12
25	41	41	8	41	13
28	42		9		

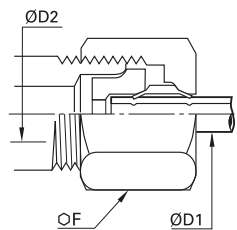
# Complementary Brass Compression Fittings


**0166**

3-Piece Reducer



Brass



	ØD1	ØD2		F	kg
4	5	0166 04 05		13	0.011
	6	0166 04 06		13	0.011
	8	0166 04 08		14	0.012
	10	0166 04 10		19	0.031
	12	0166 04 12		22	0.044
	14	0166 04 14		24	0.054
5	15	0166 04 15		24	0.056
	6	0166 05 06		13	0.010
	8	0166 05 08		14	0.012
	10	0166 05 10		19	0.030
	12	0166 05 12		22	0.044
	14	0166 05 14		24	0.053
6	16	0166 05 16		27	0.078
	8	0166 06 08		14	0.012
	10	0166 06 10		19	0.030
	12	0166 06 12		22	0.043
	14	0166 06 14		24	0.052
	15	0166 06 15		24	0.054
8	16	0166 06 16		27	0.077
	10	0166 08 10		19	0.027
	12	0166 08 12		22	0.040
	14	0166 08 14		24	0.051
	15	0166 08 15		24	0.053
	16	0166 08 16		27	0.076
10	18	0166 08 18		30	0.100
	12	0166 10 12		22	0.037
	14	0166 10 14		24	0.045
	15	0166 10 15		24	0.047
	16	0166 10 16		27	0.068
	18	0166 10 18		30	0.095
12	20	0166 10 20		32	0.107
	22	0166 10 22		36	0.144
	25	0166 10 25		41	0.209
	14	0166 12 14		24	0.043
	15	0166 12 15		24	0.043
	16	0166 12 16		27	0.066
14	18	0166 12 18		30	0.092
	20	0166 12 20		32	0.102
	22	0166 12 22		36	0.140
	25	0166 12 25		41	0.200
	16	0166 14 16		27	0.060
	18	0166 14 18		30	0.084
15	20	0166 14 20		32	0.095
	22	0166 14 22		36	0.133
	25	0166 14 25		41	0.189
	18	0166 15 18		30	0.081
16	22	0166 15 22		36	0.130
	18	0166 16 18		30	0.078
	20	0166 16 20		32	0.088
	22	0166 16 22		36	0.126
18	25	0166 16 25		41	0.185
	20	0166 18 20		32	0.082
	22	0166 18 22		36	0.118
	25	0166 18 25		41	0.180
20	28	0166 18 28		42	0.176
	20	0166 20 25		41	0.168
	22	0166 22 28		42	0.168

ØD1: tube to be fitted

ØD2: for an x mm Ø fitting


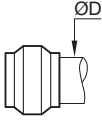

Each of the above part numbers comprises:

- a reduction piece
- an olive, PN 0124
- a sleeve nut


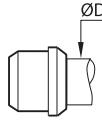



# Complementary Brass Compression Fittings


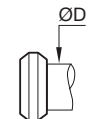

## 0124 Brass Olive

	Brass		<b>ØD</b>		<b>kg</b>
			4	<a href="#">0124 04 00</a>	0.001
			5	<a href="#">0124 05 00</a>	0.001
			6	<a href="#">0124 06 00</a>	0.001
			8	<a href="#">0124 08 00</a>	0.001
			10	<a href="#">0124 10 00</a>	0.003
			12	<a href="#">0124 12 00</a>	0.004
			14	<a href="#">0124 14 00</a>	0.005
			15	<a href="#">0124 15 00</a>	0.004
			16	<a href="#">0124 16 00</a>	0.006
			18	<a href="#">0124 18 00</a>	0.007
			20	<a href="#">0124 20 00</a>	0.009
			22	<a href="#">0124 22 00</a>	0.012
			25	<a href="#">0124 25 00</a>	0.017
			28	<a href="#">0124 28 00</a>	0.017

## 0124..40 Steel Olive

	Zinc-plated steel		<b>ØD</b>		<b>kg</b>
			4	<a href="#">0124 04 00 40</a>	0.001
			6	<a href="#">0124 06 00 40</a>	0.001
			8	<a href="#">0124 08 00 40</a>	0.001
			10	<a href="#">0124 10 00 40</a>	0.003
			12	<a href="#">0124 12 00 40</a>	0.003
			14	<a href="#">0124 14 00 40</a>	0.005
			15	<a href="#">0124 15 00 40</a>	0.004
			16	<a href="#">0124 16 00 40</a>	0.006
			18	<a href="#">0124 18 00 40</a>	0.007
			20	<a href="#">0124 20 00 40</a>	0.007
			22	<a href="#">0124 22 00 40</a>	0.010
			25	<a href="#">0124 25 00 40</a>	0.014


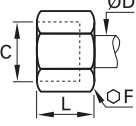

## 0111 BNA\* Brass Olive

	Brass		<b>ØD</b>		<b>kg</b>
			4	<a href="#">0111 04 00</a>	0.001
			5	<a href="#">0111 05 00</a>	0.001
			6	<a href="#">0111 06 00</a>	0.001
			8	<a href="#">0111 08 00</a>	0.001
			10	<a href="#">0111 10 00</a>	0.002
			12	<a href="#">0111 12 00</a>	0.002
			14	<a href="#">0111 14 00</a>	0.003
			15	<a href="#">0111 15 00</a>	0.003
			16	<a href="#">0111 16 00</a>	0.003


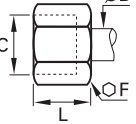

\*BNA: Bureau de Normalisation de l'Automobile (standards organization in the field of Automotive Process)

# Complementary Brass Compression Fittings


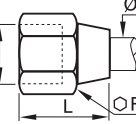

## 0110 Brass Nut

	Brass		<b>ØD</b>	<b>C</b>		<b>F</b>	<b>L</b>	<b>kg</b>				
			4	M8x1					<a href="#">0110 04 00</a>	10	11	0.005
			5	M10x1					<a href="#">0110 05 00</a>	12	11	0.006
			6	M10x1					<a href="#">0110 06 00</a>	13	11	0.008
			8	M12x1					<a href="#">0110 08 00</a>	14	13	0.008
			10	M16x1.5					<a href="#">0110 10 00</a>	19	15	0.019
			12	M18x1.5					<a href="#">0110 12 00</a>	22	15	0.026
			14	M20x1.5					<a href="#">0110 14 00</a>	24	15	0.029
			15	M20x1.5					<a href="#">0110 15 00</a>	24	15	0.028
			16	M22x1.5					<a href="#">0110 16 00</a>	27	17	0.042
			18	M24x1.5					<a href="#">0110 18 00</a>	30	18	0.057
			20	M27x1.5					<a href="#">0110 20 00</a>	32	18	0.057
			22	M30x1.5					<a href="#">0110 22 00</a>	36	19	0.078
			25	M33x1.5					<a href="#">0110 25 00</a>	41	21	0.121
28	M36x1.5	<a href="#">0110 28 00</a>	42	21	0.110							


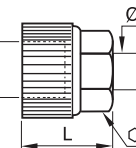

## 0110..40 Steel Nut

	Zinc-plated steel		<b>ØD</b>	<b>C</b>		<b>F</b>	<b>L</b>	<b>kg</b>				
			4	M8x1					<a href="#">0110 04 00 40</a>	10	11	0.004
			5	M10x1					<a href="#">0110 05 00 40</a>	12	11.5	0.005
			6	M10x1					<a href="#">0110 06 00 40</a>	13	12	0.008
			8	M12x1					<a href="#">0110 08 00 40</a>	14	13.5	0.008
			10	M16x1.5					<a href="#">0110 10 00 40</a>	19	16	0.018
			12	M18x1.5					<a href="#">0110 12 00 40</a>	22	16.5	0.027
			14	M20x1.5					<a href="#">0110 14 00 40</a>	24	17	0.030
			15	M20x1.5					<a href="#">0110 15 00 40</a>	24	17	0.029
			16	M22x1.5					<a href="#">0110 16 00 40</a>	27	18	0.042
			18	M24x1.5					<a href="#">0110 18 00 40</a>	30	19	0.056
			20	M27x1.5					<a href="#">0110 20 00 40</a>	32	20.5	0.061
			22	M30x1.5					<a href="#">0110 22 00 40</a>	36	21.5	0.085

## 0110..60 Brass Long Nut

	Brass		<b>ØD</b>	<b>C</b>		<b>F</b>	<b>L</b>	<b>kg</b>				
			4	M8x1					<a href="#">0110 04 00 60</a>	11	14.5	0.007
			5	M10x1					<a href="#">0110 05 00 60</a>	13	17	0.008
			6	M10x1					<a href="#">0110 06 00 60</a>	13	17.5	0.011
			8	M12x1					<a href="#">0110 08 00 60</a>	16	20	0.019
			10	M16x1.5					<a href="#">0110 10 00 60</a>	20	23	0.032
			12	M18x1.5					<a href="#">0110 12 00 60</a>	22	25	0.039
			14	M20x1.5					<a href="#">0110 14 00 60</a>	24	30	0.051
			15	M20x1.5					<a href="#">0110 15 00 60</a>	24	30	0.049
			16	M22x1.5					<a href="#">0110 16 00 60</a>	27	32	0.070
			18	M24x1.5					<a href="#">0110 18 00 60</a>	30	35	0.098
			20	M27x1.5					<a href="#">0110 20 00 60</a>	32	35	0.102
			22	M30x1.5					<a href="#">0110 22 00 60</a>	36	36	0.129

## 0110..70 Technical Polymer Nut-Olive

	Technical polymer		<b>ØD</b>	<b>C</b>		<b>F</b>	<b>L</b>	<b>kg</b>				
			4	M8x1					<a href="#">0110 04 00 70</a>	8	13	0.008
			6	M10x1					<a href="#">0110 06 00 70</a>	11	15	0.002
			8	M12x1					<a href="#">0110 08 00 70</a>	13	16	0.002
			10	M16x1.5					<a href="#">0110 10 00 70</a>	17	19	0.004
			12	M18x1.5					<a href="#">0110 12 00 70</a>	19	19	0.005
			14	M20x1.5					<a href="#">0110 14 00 70</a>	22	20	0.005
16	M22x1.5	<a href="#">0110 16 00 70</a>	24	21	0.008							

NB: polymer nut-olives should not be used on metal tubing.